

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

1903 STATION NUMBERS

Numbers 7396 to 7445

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 727
 Date, *Aug 10 1887*
 Time of day, *12:30* : of tide, *3/4*
 Locality, *Bahia Honda Harbor, Fla.*
 Exact position, *Near P. S. Boy*
 Depth, *15 fms.*
 Nature of bottom, *fine sand & shells*
 Dredging instrument used, *Small dredge*
 Direction of drift, *N. E.* ; distance, *1/2 mi.*
 Temperature of air, *68* therm. No.,
 " of surface water, ..
 " at depth of .. fathoms, ..
 " at bottom, ..
 Density at surface, .. temp., *21.5*
 " at depth of .. fathoms, ..
 " at bottom, ..
 Number of salinometer, *727*
 Barometer reading, *29.87*
 State of sky, *Partly*
 Direction of wind, *N. E.* ; force, *2*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, ..
 Service to which attached, ..
 Name and rank of commanding officer, ..
 Name and position of observer, *V. M. Boy*

NOTES RELATING TO STATION NO. 1274

1. fine in
1. blue -

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7007
 Date, Jan 11
 Time of day, 12 : of tide, High water
 Locality, Between Little Pine Key & No Name Key, Fla.
 Exact position, Between Little Pine Key & No Name Key, Fla.
 Depth, 13 fms
 Nature of bottom, rocky & at bottom not
 Dredging instrument used, dredge
 Direction of drift, : distance, 1/2 mi
 Temperature of air, 70 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0225 temp., 21
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer,
 Barometer reading, 29.86
 State of sky, B. clouds
 Direction of wind, N. E. ; force, 2
 Rain.
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, Thetis
 Service to which attached, U. S. Fish Comm.
 Name and rank of commanding officer, E. A. Mearns
 Name and position of observer, Wm. L. Mearns

NOTES RELATING TO STATION NO. 2511

Found on the
surface of
the ground
a small
stone.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date,

Time of day, 1 40 : of tide,

Locality,

Exact position,

Return Point Key & Breeze
Key, Fla.

Depth, 11

Nature of bottom, S.

Dredging instrument used, Dredge

Direction of drift, S. E. : distance,

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.022 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 700

Barometer reading, 29.86

State of sky, Partly Cloudy

Direction of wind, N. E. ; force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Com.

Name and rank of commanding officer, J. B. Smith, Lt. Comdr.

Name and position of observer, J. B. Smith, Lt. Comdr.

NOTES RELATING TO STATION NO. _____

From

Station

to

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *729*Date, *May 10 1881*Time of day, *10:30* ; of tide, *1/4 ebb*Locality, *Fla.*Exact position, *Off south end
of Johnson's Key*Depth, *12*Nature of bottom, *Rocky 3 ft. beam trawls*Dredging instrument used, *Small scrape dredge*Direction of drift, *S. W.* ; distance, *1/4 mile*Temperature of air, *69* therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1* temp., *28*

" at depth of fathoms, "

" at bottom, "

Number of salinometer,

Barometer reading, *29.85*

State of sky,

Direction of wind, *N. E.* ; force, *2*

Rain,

Direction of surface current, *S* ; force,

" of bottom " ; force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO.

1 small sea robin

2 small crabs

1 small conch

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 77-100
 Date, Jan. 5, 1903
 Time of day, 3.47 : of tide, 1/4 Ebb
 Locality, Friend Hay Lake, Fla.
 Exact position, Southern end of Friend Hay Lake, Fla.
 Depth, 10 feet
 Nature of bottom, Rocky
 Dredging instrument used, Longh. dredge
 Direction of drift, S. E. : distance, 1/2 mile
 Temperature of air, 69 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.023 temp., 31
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7
 Barometer reading, 29.85
 State of sky, Partly clear
 Direction of wind, N. E. ; force, 2
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel,
 Service to which attached,
 Name and rank of commanding officer,
 Name and position of observer,

NOTES RELATING TO STATION NO.

From survey of 1900
From 1900 to 1902
From 1902 to 1904
From 1904 to 1906
From 1906 to 1908
From 1908 to 1910
From 1910 to 1912
From 1912 to 1914
From 1914 to 1916
From 1916 to 1918
From 1918 to 1920
From 1920 to 1922
From 1922 to 1924
From 1924 to 1926
From 1926 to 1928
From 1928 to 1930
From 1930 to 1932
From 1932 to 1934
From 1934 to 1936
From 1936 to 1938
From 1938 to 1940
From 1940 to 1942
From 1942 to 1944
From 1944 to 1946
From 1946 to 1948
From 1948 to 1950
From 1950 to 1952
From 1952 to 1954
From 1954 to 1956
From 1956 to 1958
From 1958 to 1960
From 1960 to 1962
From 1962 to 1964
From 1964 to 1966
From 1966 to 1968
From 1968 to 1970
From 1970 to 1972
From 1972 to 1974
From 1974 to 1976
From 1976 to 1978
From 1978 to 1980
From 1980 to 1982
From 1982 to 1984
From 1984 to 1986
From 1986 to 1988
From 1988 to 1990
From 1990 to 1992
From 1992 to 1994
From 1994 to 1996
From 1996 to 1998
From 1998 to 2000
From 2000 to 2002
From 2002 to 2004
From 2004 to 2006
From 2006 to 2008
From 2008 to 2010
From 2010 to 2012
From 2012 to 2014
From 2014 to 2016
From 2016 to 2018
From 2018 to 2020
From 2020 to 2022
From 2022 to 2024
From 2024 to 2026
From 2026 to 2028
From 2028 to 2030
From 2030 to 2032
From 2032 to 2034
From 2034 to 2036
From 2036 to 2038
From 2038 to 2040
From 2040 to 2042
From 2042 to 2044
From 2044 to 2046
From 2046 to 2048
From 2048 to 2050
From 2050 to 2052
From 2052 to 2054
From 2054 to 2056
From 2056 to 2058
From 2058 to 2060
From 2060 to 2062
From 2062 to 2064
From 2064 to 2066
From 2066 to 2068
From 2068 to 2070
From 2070 to 2072
From 2072 to 2074
From 2074 to 2076
From 2076 to 2078
From 2078 to 2080
From 2080 to 2082
From 2082 to 2084
From 2084 to 2086
From 2086 to 2088
From 2088 to 2090
From 2090 to 2092
From 2092 to 2094
From 2094 to 2096
From 2096 to 2098
From 2098 to 2100

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date, *June 7, 1913*Time of day, *8:30 A.M.* of tide, *2*Locality, *Mary Bay, Lake, N. H.*Exact position, *1/2 mile north of Eastern
end of Indian Island Key.*Depth, *2 fms*Nature of bottom, *fine sand*Dredging instrument used, *Long line dredge*Direction of drift, *N. E.*; distance, *1/2 mile*Temperature of air, *62* therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, *1.0253* temp., *17.5*

" at depth of fathoms, "

" at bottom, "

Number of salinometer, *7111*Barometer reading, *30.04*State of sky, *Partly clear*Direction of wind, *S. S. W.*; force, *1*

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, *U.S.S. Fish Hawk*Service to which attached, *Fish Commission*Name and rank of commanding officer, *Comdr. J. H. Smith**U.S.N.*

Name and position of observer,

Wm. B. Smith

NOTES RELATING TO STATION NO. 74.

- 1 sheep wool sample
- 1 small
- 2 species of seeds
- 1 mullock
- 2 small fish

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7022
 Date, July 7, 1913
 Time of day, 9:20 A.M.; of tide, 1/4 ebb
 Locality, Oregon Bay
 Exact position, nearly 1 mile N. N. E. 1/2 E
 of Mary Reef
 Depth, 100 fms.
 Nature of bottom, sand & shells
 Dredging instrument used, beam trawl
 Direction of drift, N. E.; distance, 1/2 mile
 Temperature of air, 64 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0252 temp., 56.8
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7459
 Barometer reading, 30.95
 State of sky, Partly Cloudy
 Direction of wind, S.W.; force, 2
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, Fish Hawk
 Service to which attached, U.S. Fish Commission
 Name and rank of commanding officer, James H. Smith
 Lieutenant, U.S.N.
 Name and position of observer, Vernon B. Smith

NOTES RELATING TO STATION NO. 7000

- 2 species of amphipods
- 2 species of isopods
- amphipods
- isopods
- 2 sp. of amphipods
- 1 sp. of amphipods
- 1 new species of amphipods?

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7403
 Date, Jan. 7 1888
 Time of day, 9:40 ; of tide, $\frac{1}{2}$ ebb
 Locality, Pigeon Key Lake, Fla.
 Exact position, 1 mile S. S. E. of Coconut
 Key
 Depth, 7 fathoms
 Nature of bottom, rocky
 Dredging instrument used, small dredge
 Direction of drift, N. W. ; distance, $\frac{1}{2}$ mile
 Temperature of air, 64 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0242 temp., 72.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 741
 Barometer reading, 30.05
 State of sky, Clear
 Direction of wind, S. W. ; force, 2
 Rain,
 Direction of surface current, " ; force,
 " of bottom " : force,
 Name of vessel, Fish Hawk
 Service to which attached, U. S. Fish Comm.
 Name and rank of commanding officer, J. A. Smith,
 Doctor, U. S. N.
 Name and position of observer,
 Vernon C. Weeks.

NOTES RELATING TO STATION NO. 755.

2 species of *Amphibia*

1 small

3 species of *insects*

amphibia

Several *Amphibia* *insects* *amphibia*

Amphibia *insects*.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7727

Date, June 7, 1913

Time of day, 10:25 ; of tide, $\frac{3}{4}$ ebb

Locality, Pigeon Key Lake, Fla.

Exact position, 1 mile east of East Bahia Honda Key

Depth, 1.2 fathoms

Nature of bottom, rocky

Dredging instrument used, small scrape-dredge

Direction of drift, N. by E. ; distance, 4.0 mi.

Temperature of air, 64 therm. No.,

" of surface water,

" at depth of fathoms,

" at bottom,

Density at surface, 1.0247 temp., 67

" at depth of fathoms,

" at bottom,

Number of salinometer, 7450

Barometer reading, 30.05

State of sky, Clear

Direction of wind, S.W. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Rear Admiral, U.S.N.

Name and position of observer,

NOTES RELATING TO STATION NO. 1712

1 star-fish
3 species of urchins
3 " " fish
2 " " shrimp
1 sea-finger sponge
1 worm
2 small pieces of coral

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7495

Date, Jan. 2, 1903

Time of day, 10:50 ; of tide, Low water

Locality, Payson Key Sound, Fla.

Exact position, 1 mile East of Signal
Cocoon

Depth, 10 fathoms

Nature of bottom, rocky

Dredging instrument used, small scrape dredge

Direction of drift, East ; distance, 16 miles

Temperature of air, 64 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0282 temp., 75

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7458

Barometer reading, 30.05

State of sky, Clear

Direction of wind, S W ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Charles Smith
Breitwieser, U. S. N.

Name and position of observer,

Vernon C. Smith

NOTES RELATING TO STATION NO. 7475

2 species of fish
several others
a mussel
3 small crabs not identified

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7406

Date, Jan. 7, 1905

Time of day, 11 20 : of tide, Low water

Locality, Pigeon Key Lake, Fla.

Exact position, 2 1/2 miles N. x E. of
Pigeon Key to westward of Big Bank

Depth, 10 1/2 feet

Nature of bottom, rocky

Dredging instrument used, small scrape dredge

Direction of drift, S. W. ; distance, 46 miles

Temperature of air, 64 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0236 temp., 1 - 5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7750

Barometer reading, 30.04

State of sky, Clear

Direction of wind, S. E. ; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. M. Smith
Boatsman, U. S. N.

Name and position of observer,
Vernon C. West

NOTES RELATING TO STATION NO. 25

1 small fish
2 small grasshoppers
1 worm

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7417

Date, Jan. 7, 1903

Time of day, 11:55 A. M. of tide, 4. Flood.

Locality, Pigeon Key Lake, Fla.

Exact position, 2 $\frac{3}{4}$ miles N. N. W. of
Frobessers Key

Depth, 9 $\frac{1}{2}$ feet

Nature of bottom, rocky

Dredging instrument used, small scrape dredge

Direction of drift, S. W. ; distance, $\frac{1}{2}$ mile

Temperature of air, 64

therm. No.,

" of surface water,

"

" at depth of fathoms,

"

" at bottom,

"

Density at surface, 1.0242

temp., 18

" at depth of fathoms,

"

" at bottom,

"

Number of salinometer, 7450

Barometer reading, 30.03

State of sky, Clear

Direction of wind, S. W. ; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Retainer, U. S. N.

Name and position of observer,

Wm. E. Smith

NOTES RELATING TO STATION NO. 251

1. The station is located on the
left bank of the river, about
1/2 mile upstream from the
confluence of the river into
the lake.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7408
 Date, Jan. 7, 1902
 Time of day, 1:20 P.M.; of tide, $\frac{1}{4}$ flood.
 Locality, Pigeon Key Lake Fla.
 Exact position, $\frac{1}{2}$ miles N. E. of
 Pigeon Key.
 Depth, 12 feet.
 Nature of bottom, rocky
 Dredging instrument used, small scrape-dredge
 Direction of drift, N. E. ; distance, $\frac{1}{2}$ mile
 Temperature of air, 64 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0246 temp., 18.57
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 30.03
 State of sky, Partly clear.
 Direction of wind, S. W. ; force, 3
 Rain,
 Direction of surface current, ; force,
 " of bottom " : force,
 Name of vessel, Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, James H. Smith
 Boatman, U. S. N.
 Name and position of observer,
 Vernon C. West

NOTES RELATING TO STATION NO. 7th & 8.

2 fish

Few animals

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7419

Date, Jan 7, 1903

Time of day, 3:00 P. M.; of tide, $\frac{1}{2}$ flood

Locality, Pigeon Key Lake, Fla

Exact position, $1\frac{1}{2}$ mile N. W. of Pigeon Key

Depth, $10\frac{1}{2}$ feet

Nature of bottom, rocks

Dredging instrument used, Small scrape dredge

Direction of drift, N. E. ; distance, 10 miles

Temperature of air, 65 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0248 temp., 18

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7419

Barometer reading, 29.98

State of sky, Partly cloudy

Direction of wind, S. E. ; force, 3

Rain,

Direction of surface current, : force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatsman, U. S. N.

Name and position of observer,
Vernon C. Smith

NOTES RELATING TO STATION NO. 2702

5 small fish

1 sheep head sponge

several logg. head sponges

1 bucket

several knives

several small yaks

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7415

Date, June 4, 1903

Time of day, 8:45 A.M. of tide, 1/2 ebb

Locality, North of Knight's Bay Channel, Fla.

Exact position, 1/2 mile to eastward of middle of Knight's Bay.

Depth, 9 feet

Nature of bottom, rocky

Dredging instrument used, small scrape dredge

Direction of drift, West ; distance, 1/2 mile

Temperature of air, 66 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0245 temp., 78.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7400

Barometer reading, 30.0

State of sky, Clear

Direction of wind, S.W. ; force, 2

Rain, —

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. A. Smith
Lieutenant, U.S.N.

Name and position of observer,

James B. Smith

NOTES RELATING TO STATION NO. 9 ...

2. ...

...

...

...

...

...

...

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7411

Date, Jan 22, 1913

Time of day, 8.40 A.M., of tide. $\frac{1}{2}$ Flood

Locality, N. of Knight's Key Channel, Fla.

Exact position, 3 1/2 mi. E. & N. of Knight's Key

Konda Key

Depth, 10 fath.

Nature of bottom, rocky

Dredging instrument used, small scoop dredge.

Direction of drift, N. W. ; distance, 1/2 mile

Temperature of air, 57 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0229 temp., 20

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7751

Barometer reading, 30.04

State of sky, cloudy

Direction of wind, N. W. ; force, 2

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Commission

Name and rank of commanding officer, James A. Smith, Lt. Comdr.

Name and position of observer,

Vernon E. Hart

NOTES RELATING TO STATION NO. 241.

- 2 species of fish
- 1000 - 2000 ft.
- 3 species of birds
- 2 species of insects
- 2 species of plants
- 6 species of reptiles
- 2 species of mammals

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7412

Date, Jan. 22, 1903

Time of day, 9:20 A.M.; of tide, $\frac{1}{2}$ ebb

Locality, N. of Long's Key, Fla.

Exact position, 3 mi. N. E. of S. of Bahia Honda Key.

Depth, 11 fathoms

Nature of bottom, rocky

Dredging instrument used, small scrape dredge

Direction of drift, N. W. ; distance, $\frac{1}{2}$ mile

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0236 temp., 20

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.06

State of sky, Cloudy

Direction of wind, N. N. W.; force, 1.

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Name and position of observer,

NOTES RELATING TO STATION NO. 2712

Several species of fish,

1 crab

Several species of

small shrimp

small crabs

Several species of

small crustaceans

1 crab

1 small fish

1 small fish

Several species of small

2 small fish

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7413

Date, Jan. 22, 1913

Time of day, 10:15 A.M.; of tide, High Water.

Locality, N. of Knight's Key, Fla.

Exact position, 4 3/4 mi. N. of Knight's Key.

Bahia Honda Key.

Depth, 11 1/2 feet

Nature of bottom, fine sand & shells

Dredging instrument used, Smith's dredge

Direction of drift, East; distance, 1/2 mile

Temperature of air, 71 therm. No..

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0239 temp., 20

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7550

Barometer reading, 30.08

State of sky, Cloudy.

Direction of wind, Calm; force, 0

Rain, /

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James H. Smith

Boatswain, U.S.N.

Name and position of observer,

Vernon S. Smith.

NOTES RELATING TO STATION NO. 2111

several notes
on a small
1. 1/2 page from
the bottom of the
box of samples

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7414

Date, Jan. 22, 1902

Time of day, 11:50 A.M.; of tide, High Water.

Locality, N. of Pointe à la Pige, N. H.

Exact position, 4 miles N. W. of Pointe à la Pige, N. H.

Depth, 11 fms.

Nature of bottom, M. S.

Dredging instrument used, Long line dredge.

Direction of drift, S. E.; distance, 2 miles.

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0257 temp., 29.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7922

Barometer reading, 30.09

State of sky, P. C.

Direction of wind, W. N. W.; force, 1

Rain, /

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk.

Service to which attached, Fish Commission.

Name and rank of commanding officer, James A. Smith,
Boatswain, U. S. N.

Name and position of observer,

W. H. Smith

NOTES RELATING TO STATION NO. 5

1. The station is located on the

left bank of the river

near

the bridge

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. *7415*
 Date, *Jan. 22, 1913*
 Time of day, *11:45 A.M.*; of tide, *1/2 ebb*
 Locality, *N. of ... Bay, ...*
 Exact position, *5 mi. N. E. of ...*
Rabon Bay, ...
 Depth, *1 fath.*
 Nature of bottom, *Hard sand & rock*
 Dredging instrument used, *Small scoop dredge*
 Direction of drift, *S. E.*; distance, *1/2 mi.*
 Temperature of air, *73* therm. No.,
 " of surface water, ..
 " at depth of fathoms, ..
 " at bottom, ..
 Density at surface, *1.0235* temp., *20.1*
 " at depth of fathoms, ..
 " at bottom, ..
 Number of salinometer, *7455*
 Barometer reading, *30.08*
 State of sky, *Partly clear*
 Direction of wind, *N. N. W.*; force, *1*
 Rain, ,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, *Fish Hawk*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *J. ...*
12 ...
 Name and position of observer, *...*

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7415

Date, Aug. 22, 1913

Time of day, 1:15 P.M.; of tide, 2/3 ebb

Locality, N. of Fingert Key, Fla.

Exact position, 2 3/4 mi. N. of Indian Bank

Depth, 15 fms.

Nature of bottom, sandy.

Dredging instrument used, small beam trawl

Direction of drift, S. E.; distance, 1/2 mi.

Temperature of air, 68 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0213 temp., 27

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7455

Barometer reading, 30.07

State of sky, Partly clear

Direction of wind, W. N. W.; force, 3

Rain, "

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James H. Smith

" " " "

Name and position of observer,

Vernon E. West

NOTES RELATING TO STATION NO. 20

2. 100 ft. - 100 ft.

2. 100 ft. - 100 ft.

2. 100 ft. - 100 ft.

2. 100 ft. - 100 ft.

2. 100 ft. - 100 ft.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 747

Date, Jan. 22, 1913

Time of day, 1:50 P.M.; of tide, H. H.

Locality, S. of Fiddlers Key, Fla.

Exact position, 2 mi. N. E. of Fiddlers Key, Fla.

Depth, 20 fathoms

Nature of bottom, sand

Dredging instrument used, Dredge

Direction of drift, N. E.; distance, 1/2 mi.

Temperature of air, 67 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0211 temp., 21.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7456

Barometer reading, 30.06

State of sky, Partly clear

Direction of wind, N. W. H.; force, 3

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. A. Smith
Lieutenant, U. S. N.

Name and position of observer,

James B. Smith

NOTES RELATING TO STATION NO. 74

5.2 p.m.
2. 10. 1960
1. 10. 1960
2. 10. 1960
3. 10. 1960

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7800

Date, June 22, 1902

Time of day, 2:25 P.M.; of tide, low

Locality, N. of Annapolis Bay, Md.

Exact position, 1/2 mi. N. W. of Annapolis
Harbor

Depth, 10 fms.

Nature of bottom, soft mud

Dredging instrument used, dredge

Direction of drift, S. E.; distance, 1/2 mi.

Temperature of air, 67 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0210 temp., 62

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.06

State of sky, Partly cloudy

Direction of wind, N. N. W.; force, 3

Rain.

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Robertson, U.S.N.

Name and position of observer,

Vernon E. West.

NOTES RELATING TO STATION NO. 201

1. 100
2. 100

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7417

Date, June 22, 1912

Time of day, 2:45 P.M. of tide, 1/2 ebb

Locality, N. of Houghton Reef, S. of

Exact position, 1/2 mi. N. W. of H. Reef, S. of

Depth, 2 fathoms

Nature of bottom, sandy

Dredging instrument used, Long line dredge

Direction of drift, N. W. ; distance, 1/2 mi.

Temperature of air, 67 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0217 temp., 22

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.06

State of sky, Partly cloudy

Direction of wind, N. W. ; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Commission

Name and rank of commanding officer, J. A. Smith, U. S. N.

Name and position of observer, Vernon S. H.

NOTES RELATING TO STATION NO. 700

1. 2/1/1911
2. 2/1/1911
3. 2/1/1911
4. 2/1/1911
5. 2/1/1911
6. 2/1/1911
7. 2/1/1911
8. 2/1/1911
9. 2/1/1911
10. 2/1/1911

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. *7420*
 Date, *Jan. 22, 1902*
 Time of day, *3:20 P.M.*; of tide, *High*
 Locality, *N. of Smith's Bay, Va.*
 Exact position, *1/2 mi. N. E. corner of
Smith's Bay*
 Depth, *5 ft.*
 Nature of bottom, *fine sand*
 Dredging instrument used, *Long line dredge*
 Direction of drift, *S. E.*; distance, *1/2 mi.*
 Temperature of air, *67* therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.0220* temp.,
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, *7400*
 Barometer reading, *30.05*
 State of sky, *Partly cloudy*
 Direction of wind, *N. W.*; force, *3*
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, *U. S. Fish Comm.*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *James A. Smith
Lieutenant, U. S. N.*
 Name and position of observer, *Vernon E. Went.*

NOTES RELATING TO STATION NO.

[Faint handwritten notes, mostly illegible]
... ..
... ..
... ..
... ..
... ..
... ..

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 782.

Date, Jan. 2, 1913

Time of day, 10.05 A.M.; of tide, $\frac{1}{2}$ flood.

Locality, Grassy Key Lake, Fla.

Exact position, $\frac{3}{4}$ mi. N. E. x N. of BambooKey
Depth, $9\frac{1}{2}$ feet

Nature of bottom, soft

Dredging instrument used, small seine and dredge

Direction of drift, N. E. ; distance, $\frac{1}{4}$ mile

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0221 temp., 21.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 1000

Barometer reading, 30.07

State of sky, Partly cloudy

Direction of wind, N. W. E. ; force, 5

Rain,

Direction of surface current, ; force, 1

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lieut. Comdr. W. L. Smith

Boatman, U.S.N.

Name and position of observer,

NOTES RELATING TO STATION NO. 7

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7922

Date, Jan. 23, 1903

Time of day, 11:25 A.M.; of tide, $\frac{3}{4}$ flood.

Locality, Buzzards Bay Sound

Exact position, 2 $\frac{3}{4}$ mi. N. N. W. of

Depth, 9 fms.

Nature of bottom, sand & shells

Dredging instrument used, Dredge

Direction of drift, N. E.; distance, $\frac{1}{2}$ mile

Temperature of air, 65 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0225 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 745

Barometer reading, 30.09

State of sky, Partly clear

Direction of wind, N. N. E.; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Comm.

Name and rank of commanding officer, Lieut. Comdr. U. S. N.

Routledge, U. S. N.

Name and position of observer,

Vernon C. Wood.

NOTES RELATING TO STATION NO. 202

3 1/2 ft. - 4 ft. -
20 ft. - 25 ft. -
1 ft. - 1 1/2 ft. -
3 ft. - 4 ft. -
1 ft. - 1 1/2 ft. -
1 ft. - 1 1/2 ft. -

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7423

Date, Jan 23, 1913

Time of day, 12 A M ; of tide, High Water

Locality, N. N. E. of Key

Exact position, 5 mi N. N. E. of Key

Depth, 10 feet

Nature of bottom, rocky

Dredging instrument used, Small scrape dredge

Direction of drift, N. E. ; distance, 1/2 mile

Temperature of air, 72 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0222 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7456

Barometer reading, 30.09

State of sky, Partly cloudy

Direction of wind, N. N. E. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,
Vernon C. West

NOTES RELATING TO STATION NO. 2.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7424

Date, Jan. 25, 1902

Time of day, 11:15 P.M.; of tide, High water

Locality, Grand Bay, Fla.

Exact position, 1/2 mile WNW. of
Cam ...

Depth, 10 fathoms

Nature of bottom, ...

Dredging instrument used, ...

Direction of drift, N.W.; distance, 4 miles

Temperature of air, 69 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.025 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.03

State of sky, Partly cloudy.

Direction of wind, N.N.E.; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. ...
Boatswain, U.S.N.

Name and position of observer,
Vernon E. Hunt.

NOTES RELATING TO STATION NO. 1000

6

... ..

4-11-68

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7425

Date, Jan. 23, 1913

Time of day, 1:25 P.M.; of tide, High water

Locality, Fildes Bay, F.R.G.

Exact position, 1/2 mi. N. 1/2 N. of
Bamboo Key.

Depth, 8 fathoms

Nature of bottom, sand & shells

Dredging instrument used, Smith's scrape dredge

Direction of drift, N. by E.; distance, 1/4 mi.

Temperature of air, 69 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0251 temp., 20

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7455

Barometer reading, 30.01

State of sky, Partly clear

Direction of wind, N. N. E.; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Name and position of observer,

NOTES RELATING TO STATION NO. 74

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 426

Date, July 27, 1913

Time of day, 1:30 P.M.; of tide, 4. Flood

Locality, Hawk Channel, Fla.

Exact position, 1 1/2 miles S. W. of S. Pigeon

Depth, 3 fms.

Nature of bottom, Sand & grass

Dredging instrument used, Oyster dredge

Direction of drift, North; distance, 1/2 mi.

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 temp., 23.5

" at depth of fathoms, "

" at bottom, 1.0230 " 23.5

Number of salinometer, 1000

Barometer reading, 29.95

State of sky, Clear

Direction of wind, E. S. E.; force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Com. Bureau

Name and rank of commanding officer, J. B. Smith, Lt. Comdr.

Name and position of observer,

Vernon E. West

NOTES RELATING TO STATION NO. 7-22

1. 6/11/22

4. 6/11/22

1. 6/11/22

1. 6/11/22

2. 6/11/22

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7000

Date, Jan. 20, 1903

Time of day, 2:15 P.M.; of tide, H. Flood

Locality, Bank Channel, Fla.

Exact position, 3 miles S. of Ft. Pierce

Depth, 1 1/2 feet

Nature of bottom, sand

Dredging instrument used, Dredge

Direction of drift, S. E. ; distance, 1/2 mile

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0229 temp., 28.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7000

Barometer reading, 29.8

State of sky, Clear

Direction of wind, E. S. E. ; force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Commission

Name and rank of commanding officer, J. W. Smith
Lieutenant U. S. N.

Name and position of observer,

NOTES RELATING TO STATION NO. 11

1. small blue ...
2. ...
1. ...
1. large ...
1. ...
1. large ...
1. ...
coral
...
...
2 species of ...
2 species of ...
...
...

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7428
 Date, Jan. 27, 1902
 Time of day, 2.30 P.M. of tide, 1/2 flood
 Locality, Hawk Channel, Conn.
 Exact position, 1 mi. N. W. of Port
 Depth, 23 1/2 fms
 Nature of bottom, rocky
 Dredging instrument used, dredge
 Direction of drift, S. E. : distance, 1/2 mi.
 Temperature of air, 78 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0226 temp., 59.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7450
 Barometer reading, 29.95
 State of sky, Clear
 Direction of wind, S. E. ; force, 2
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, James A. Smith
 Boatman, S. W.
 Name and position of observer, J. B. Smith

NOTES RELATING TO STATION NO. 7

1. 6
2. 100 ft
3. 100 ft
4. 100 ft
5. 100 ft
6. 100 ft
7. 100 ft
8. 100 ft
9. 100 ft
10. 100 ft

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7424

Date, Jan 28, 1902

Time of day, 4:15 P.M.; of tide, 3/4 flood.

Locality, Hawk Channel

Exact position, 1/2 mi. S. E. of

S. E. end of Green Key.

Depth, 2 1/4 fms.

Nature of bottom, rocky

Dredging instrument used, Ag. Dredge

Direction of drift, S. E.; distance, 1/2 mile

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0257 temp., 79.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7455

Barometer reading, 29.75

State of sky, Partly cloudy

Direction of wind, S.W.; force, 2

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatwain, U.S.N.

Name and position of observer,

Hiram S. Smith

NOTES RELATING TO STATION NO. 72.

1. The first of the two
main channels of the
river is about 100
feet wide and 10
feet deep. The second
channel is about 50
feet wide and 5
feet deep. The river
is about 100 feet
wide at its mouth.

and
the
river

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date.

Time of day, 8:40 A.M.; of tide, $\frac{1}{2}$ ebb.

Locality, 1/2 mile S. of Long Point, Ind.

Exact position, 2 miles N.W. of east end of Long Point, Ind.

Depth, 10 fms.

Nature of bottom, m. s.

Dredging instrument used, small escape dredge.

Direction of drift, N.W.; distance, 40 m.

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0224 temp., 24

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.94

State of sky, Cloudy

Direction of wind, E. by S.; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Commission

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith, Lt.

R. A. Smith, Jr.

Name and position of observer.

NOTES RELATING TO STATION NO. 7432.

- 2 species fish
- 1 large finger sponge
- 2 shrimp
- 2 crabs
- a nodium
- 1 small blenny

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7857

Date, Jan. 28, 1903

Time of day, 10.20 A.M. of tide, $\frac{3}{4}$ ebb.

Locality, Grassy Key, Lake

Exact position, 3.5 mi. N. W. W. N. of east

Depth, 8 fms.

Nature of bottom, rocky

Dredging instrument used, dredge

Direction of drift, N. E. ; distance, 1/2 mi.

Temperature of air, 75° therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0224 temp., 24

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7456

Barometer reading, 29.95

State of sky, Cloudy

Direction of wind, S. W. ; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. H. ...

Name and position of observer, V. ...

NOTES RELATING TO STATION NO. 7431

acidium

2 fish

coral

finger sponges

loggerhead sponges

gorgonian

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No.

Date, Jan 10 1885

Time of day, 9 15 A.M. : of tide, 1/2 ebb

Locality, Florida Bay, Fla.

Exact position, 6 1/4 mi N. W. x W. of Lk.

Depth, 8 feet

Nature of bottom, sand & shells

Dredging instrument used, dredge

Direction of drift, N E ; distance, 1/2 mi.

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.022 temp., 72

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 344

Barometer reading, 29.9

State of sky, Clear

Direction of wind, East ; force, 2

Rain.

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel, U.S. Fish Com.

Service to which attached, U.S. Fish Com.

Name and rank of commanding officer, J. B. Smith, Lt. Comdr.

Name and position of observer,

NOTES RELATING TO STATION NO. 7932

1. 10/10/1911

2. 10/10/1911

3. 10/10/1911

4. 10/10/1911

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7433
 Date, Jan. 29, 1913
 Time of day, 9:50 A.M.; of tide, $\frac{1}{2}$ ebb
 Locality, Fanning Bay, Fla.
 Exact position, 2 3/4 m N.W. 1/4 of Sec. 10, T. 1 N., R. 10 E.,
 Key.
 Depth, 8 fms.
 Nature of bottom, sand & shells.
 Dredging instrument used, small scrape dredge
 Direction of drift, N. 1/2 E.; distance, 1/2 mi.
 Temperature of air, 78 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0219 temp., 23.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7456
 Barometer reading, 29.93
 State of sky, Partly cloudy
 Direction of wind, East; force, 3
 Rain,
 Direction of surface current, ; force,
 " of bottom " ; force,
 Name of vessel, Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, James A. Smith
 Boatman, Y. S. Co.
 Name and position of observer,
 Vernon E. Hunt.

NOTES RELATING TO STATION NO. 24-20

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 2533

Date, Jan. 29, 1903

Time of day, 10:20 A.M.; of tide, $\frac{1}{2}$ ebb

Locality, Florida Bay, Fla.

Exact position, 7 $\frac{3}{4}$ mi. S. x W. $\frac{1}{2}$ W. of
Sandy Key.

Depth, 10 fms.

Nature of bottom, rocks

Dredging instrument used, Smith's dredge

Direction of drift, N. E. ; distance, $\frac{1}{2}$ mi.

Temperature of air, 75° therm. No..

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 temp., 73

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7453

Barometer reading, 30.0

State of sky, Partly cloudy

Direction of wind, S. E. ; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U.S. Fish Commission

Name and rank of commanding officer, J. A. Smith, Lt. Comdr.

Name and position of observer,

Samuel B. Smith

NOTES RELATING TO STATION NO. 2725

2. 1. 1970

2. 2. 1970

1. 1. 1970

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 2435
 Date, Jan. 29 1913
 Time of day, 10:45 A.M. of tide, Low water
 Locality, Florida Bay, Fla.
 Exact position, 5 mi S $\frac{1}{2}$ W. of Looe Key
 Depth, 11 $\frac{1}{2}$ fathoms
 Nature of bottom, Sand mud & grass
 Dredging instrument used, small rectangle dredge
 Direction of drift, S. by E. ; distance, 10 mi.
 Temperature of air, 75 therm. No.,
 " of surface water, ..
 " at depth of fathoms, ..
 " at bottom, ..
 Density at surface, 1.0234 temp., 23
 " at depth of fathoms, ..
 " at bottom, ..
 Number of salinometer, 2000
 Barometer reading, 29.94
 State of sky, Clear
 Direction of wind, S.W. ; force, 2
 Rain.
 Direction of surface current, : force,
 " of bottom " ; force,
 Name of vessel, Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, James A. Smith
 Boatman, U.S.N.
 Name and position of observer,
 Vernon C. West.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7736

Date, Jan. 29, 1913

Time of day, 11.20 A.M.; of tide, Low water

Locality, Florida Bay, Fla.

Exact position, 7 1/2 mi. S. E. of Sandy Key

Depth, 10 fms.

Nature of bottom, Hard sand.

Dredging instrument used, Small sample dredge

Direction of drift, East; distance, 1/2 mi.

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0212 temp., 23.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7453

Barometer reading, 29.97

State of sky, Partly cloudy

Direction of wind, E. E. ; force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,

William S. Smith

NOTES RELATING TO STATION NO. 2511

120

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7437

Date, Jan. 29, 1903

Time of day, 11:30 A.M.; of tide, $\frac{1}{4}$ ebb

Locality, ^{upper} Jewfish Run, near its mouth

Exact position, 64 m. S. E. of

San Jose Bay

Depth, 15 fathoms

Nature of bottom, sandy

Dredging instrument used, beam trawl dredge

Direction of drift, N. E. ; distance, $\frac{1}{2}$ mi.

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.022 temp., 72

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7438

Barometer reading, 29.85

State of sky, Clear

Direction of wind, East ; force, 2

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Y. S. Smith

NOTES RELATING TO STATION NO. 1121

1. 1121
2. 1122
3. 1123
4. 1124
5. 1125
6. 1126
7. 1127
8. 1128
9. 1129
10. 1130

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7430

Date, Jan 27 1903

Time of day, 1:00 P.M.: of tide, 1/4 ebb

Locality, ^{upper} Jewell Creek Lake, Ill.

Exact position, 6 1/4 mi. N.W. 1/4 sec. 10, T. 38 N., R. 10 E., S. 10 E.

Depth, 3 fms.

Nature of bottom, barry

Dredging instrument used, beam trawl

Direction of drift, S. E. : distance, 1/2 mile

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0275 temp., 59

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7411

Barometer reading, 29.91

State of sky, Partly Cloudy

Direction of wind, East ; force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, U.S. Commission

Name and rank of commanding officer, James H. Smith, Lt. Comdr., U.S.N.

Name and position of observer,

James H. Smith, U.S.N.

NOTES RELATING TO STATION NO. 7-30

1. The station is located on the
2. left bank of the river, about
3. 100 feet upstream from the
4. confluence of the river into
5. the lake.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7439

Date, Jan. 29, 1903

Time of day, 1:21 P.M.; of tide, $\frac{1}{4}$ Flood

Locality, Florida Bay, Fla.

Exact position, 5 km. N. E. of Key

Island

Depth, 7 fms.

Nature of bottom, sand, mud & coral

Dredging instrument used, Long Beach dredge

Direction of drift, West; distance, $\frac{1}{2}$ mile

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0219 temp., 28

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.91

State of sky, Clear

Direction of wind, East; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatsman, U.S.N.

Name and position of observer,

V. M. Smith

NOTES RELATING TO STATION NO. 1944

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7440
 Date, Jan. 29 1913
 Time of day, 2:25 P.M.: of tide, 4/5 low.
 Locality, Green Bay, Wis.
 Exact position, 2 3/4 mi. N. 1/2 W. of
 Channel Bay
 Depth, 7 1/2 feet
 Nature of bottom, rocky
 Dredging instrument used, S. dredge
 Direction of drift, N. 1/2 E.; distance, 1/2 mi.
 Temperature of air, 77 therm. No.,
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0255 temp., 54.5
 " at depth of fathoms, "
 " at bottom, "
 Number of salinometer, 7457
 Barometer reading, 29.70
 State of sky, Clear
 Direction of wind, East; force, 2
 Rain,
 Direction of surface current, : force,
 " of bottom " : force,
 Name of vessel, Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, James L. Smith
 Boatman, U. S. N.
 Name and position of observer,
 Vernon C. Hootch

NOTES RELATING TO STATION NO. 710

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7441

Date, Jan. 29, 1913

Time of day, 2:45 P.M.; of tide, $\frac{1}{2}$ ebb.

Locality, Greenough Key, Lake George.

Exact position, 2 mi. N. of Lake George.

Depth, 8 fathoms.

Nature of bottom, sand & shells.

Dredging instrument used, Smith's dredge.

Direction of drift, S. by E.; distance, $\frac{1}{2}$ mi.

Temperature of air, 71 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface, 1.025 temp., 68.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7455

Barometer reading, 29.82

State of sky, B.

Direction of wind, East; force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. W. Smith

B. S. Smith, 1st Lieut.

Name and position of observer,

Vernon S. Smith.

NOTES RELATING TO STATION NO. 1000

1. The station is located on the left bank of the river, about 100 feet from the water.

2. The station is a small, rectangular structure, about 10 feet long and 5 feet wide.

3. The station is built of concrete and is surrounded by a low wall.

4. The station is used for the purpose of measuring the flow of the river.

5. The station is located in a clear, open area.

6. The station is well maintained and is in good condition.

7. The station is a good example of a simple, effective flow measurement station.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7442

Date, Jan. 29, 1902

Time of day, 3 15 P. M.; of tide, $\frac{1}{2}$ ebb

Locality, Channel Key Lake, Fla.

Exact position, 1 1/2 mi. E. of Lake

Key.

Depth, 1 1/2 fms.

Nature of bottom, sand & gravel with some

Dredging instrument used, Small dredge

Direction of drift, E. & S.; distance, $\frac{1}{4}$ mi.

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.025 temp.,

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 790

Barometer reading, 29.89

State of sky, Clear

Direction of wind, East; force, 2

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, U. S. Fish Commission

Name and rank of commanding officer, J. B. ...

Boatman ...

Name and position of observer,

...

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7443

Date, Jan. 30, 1902

Time of day, 8:05 A. M.; of tide, $\frac{1}{4}$ ebb

Locality, Channel New Lane, Fla.

Exact position, 2 mn. N. N. W. $\frac{1}{2}$ M. of West

end of Long Key

Depth, 3 to 5

Nature of bottom, Hard sand

Dredging instrument used, Small scoop dredge

Direction of drift, N. E. ; distance, $\frac{1}{2}$ mn

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0252 temp., 74

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.94

State of sky, Clear

Direction of wind, N. N. E. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Comm. service

Name and rank of commanding officer, James A. Smith

Warranted Master, U. S. N.

Name and position of observer,

James A. Smith

NOTES RELATING TO STATION NO. 200.

2

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7444

Date, Jan. 31, 1903

Time of day, 9 00 A.M.; of tide, 4 ebb

Locality, ^{Lower} English Bush Lake, Fla.

Exact position, 3 1/2 mi. N. & W. W. of West end of Long Key.

Depth, 7 feet

Nature of bottom, ...

Dredging instrument used, small rope dredge

Direction of drift, N. N. E.; distance, 1/2 mi.

Temperature of air, 75 therm. No..

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0219 temp., 22.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.96

State of sky, Clear

Direction of wind, N. N. E.; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Boatswain, U. S. N.

Name and position of observer,

Vernon E. West

NOTES RELATING TO STATION NO. 2944

- 3 yellow fish
- 2 blue crabs
- 2 white fish
- 2 small coral sponges
- 1 yellow sponge
- several non-commercial sponges
- 1 yellow fish
- 2 small fish
- unidentified

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 7445

Date, Jan. 30, 1903

Time of day, 9:35 A. M.; of tide, $\frac{1}{2}$ ebb

Locality, ^{upper} Jewfish Bush Lake, Fla.

Exact position, 5 mi. N. W. 3/4 of West

end of Long Key

Depth, 8 1/2 feet

Nature of bottom, bay

Dredging instrument used, Smith's scrape dredge

Direction of drift, N. W. ; distance, 1/4 mi.

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0205 temp., 24

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.96

State of sky, Clear

Direction of wind, N. N. E. ; force, 3

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, J. A. A. Smith

Boatsman, U. S. N.

Name and position of observer,

Vernon E. West

NOTES RELATING TO STATION NO. 2111

2 sponges

1 regular

1 1/2 oz. can

2 non-commercial sponges